PATENT COOPERATION TREATY PCT

INTERNATIONALSEARCHREPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference R724-PCT	FOR FURTHER ACTION as wel	see Form PCT/ISA/220 l as, where applicable, item 5 below.		
International application No. PCT/JP2005/009008	International filing date(day/month/year) 11.05.2005	(Earliest) Priority Date (day/month/year) 12.05.2004		
Applicant SHOWA DENKO K.K.				
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of 2 sheets.				
It is also accompanied by a copy of each prior art document cited in this report.				
 Basis of the report With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)). 				
b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. 1.				
2. Certain claims were found unsearchable (See Box II).				
3. Unity of invention is lacking (See Box III).				
4. With regard to the title,				
the text is approved as subm				
the text has been established by this Authority to read as follows:				
	•			
5. With regard to the abstract,	•			
the text is approved as submit				
the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.				
6. With regard to the drawings,				
a. the figure of the drawings to be published with the abstract is Figure No4				
as suggested by the applicant.				
as selected by this Authority, because the applicant failed to suggest a figure.				
as selected by this Authority, because this figure better characterizes the invention.				
b. none of the figures is to be pu	blished with the abstract.			

INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/009008

A. CLASSIFICATION OF SUBJECT MATTER

Int,Cl.7 H01L21/205, C23C16/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl.⁷ H01L21/205, C23C16/34

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005
Registered utility model specifications of Japan 1996-2005
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropria

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	JP 2003-243302 A (SHOWA DENKO K.K.) 2003.08.29, paragraph[0074]-[0076] & WO 2003/068699 A1	1-5,9,12,13 6,11 7
X A	JP 2004-096021 A (SHOWA DENKO K.K.) 2004.03.25, paragraph[0068]-[0071] (Family: none)	1-5,9 7
Υ .	JP 2003-133649 A (SHARP CORPORATION) 2003.05.09, paragraph[0058] & US 2005/042787 A1	6
х	JP 2004-080047 A (TOYODA GOSEI CO. LTD.) 2004.03.11, paragraph[0019], FIG1 (Family: none)	8,10
Y	JP 2002-057161 A (SONY CORPORARION) 2002.02.22, paragraph[0051] & EP 1179859 A2	11

Further documents are listed in the continuation of Box C.	See patent family annex.	
* Special categories of cited documents: "A" document defining the general state of the art which is considered to be of particular relevance. "E" earlier application or patent but published on or after the int national filing date "L" document which may throw doubts on priority claim(s) or whi is cited to establish the publication date of another citation or out special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or out means "P" document published prior to the international filing date but la than the priority date claimed	understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such	
Date of the actual completion of the international search	Date of mailing of the international search report	
10.08.2005	23. 8. 2005	
Name and mailing address of the ISA/JP	Authorized officer 4R 8831	
Japan Patent Office	Ryu Ikefuchi	
3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Telephone No. +81-3-3581-1101 Ext. 3471	